

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) The method of claim 4~~19~~, wherein the piezoelectric film is ~~selected from the group consisting of~~composed of:

a) ~~aluminum nitride; and~~ or

b) ~~zinc oxide.~~

3. (Currently Amended) The method of claim 4~~19~~, wherein the patterned electrode is ~~selected from the group consisting of~~composed of aluminum ~~and~~ or titanium.

4. (Currently Amended) The method of claim 4~~19~~, wherein the substrate is ~~selected from the group consisting of~~composed of silicon ~~and~~ or gallium arsenide.

5. (Canceled)

6. (Currently Amended) The method of claim 5~~19~~, wherein ~~substep (b) is achieved using the step of planarizing~~ includes employing a chemical mechanical polishing process.

7. (Currently Amended) The method of claim 5~~19~~, wherein ~~substep (b) is achieved using the step of planarizing~~ includes employing a polymer planarization process.

8. (Currently Amended) The method of claim 5~~19~~, wherein ~~step (b) is achieved using the step of planarizing~~ includes employing a reflow and lift-off process.

9. (Currently Amended) The method of claim 519, wherein the non-conducting layer has a low dielectric constant.

10. (Currently Amended) The method of claim 519, wherein the non-conducting layer is SiO₂.

11-18 (Canceled)

19. (New) A method of forming a thin film acoustic device, the device including a patterned electrode with an edge and a height, the patterned electrode formed on a substrate and a piezoelectric film to be formed on the patterned electrode, the method comprising the steps of:

depositing a non-conducting layer on the patterned electrode and substrate;
and

planarizing the non-conducting layer so that the non-conducting layer has a height that is equal to a height of the patterned electrode.

20. (New) The method of claim 19, further comprising:

forming the piezoelectric film on the patterned electrode and planarized non-conducting layer.

21. (New) The method of claim 19, wherein the piezoelectric film serves as a support membrane for the device.

22. (New) A method of forming a thin film acoustic device, comprising:

forming an electrode on a substrate;
patterning the electrode;
depositing a non-conducting layer on the patterned electrode and substrate;
planarizing the non-conducting layer so that the non-conducting layer and

patterned electrode form a continuous layer having a level surface; and
forming a piezoelectric layer on the level surface of the continuous layer.

23. (New) The method of claim 22, wherein the level surface provided by the planarized non-conducting layer and patterned electrode improves the mechanical integrity of the piezoelectric layer by eliminating the edge of the patterned electrode.

24. (New) A method of improving the mechanical integrity of a piezoelectric film layer during fabrication of a thin film acoustic device, the device including a patterned electrode with an edge an a height, the patterned electrode formed on a substrate and the piezoelectric film layer to be formed on the patterned electrode, the method comprising the steps of:

depositing a non-conducting layer on the patterned electrode and substrate;
and

planarizing the non-conducting layer so that the non-conducting layer and patterned electrode form a continuous layer having a level surface, improving the mechanical integrity of the piezoelectric layer by eliminating the edge of the patterned electrode.